# Impact of a guideline update on recommendations and didactic material: the example of AFAM (African First Aid Materials)

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# Background

In 2011, Belgian Red Cross developed first aid and prevention guidelines adapted to the Sub-Saharan African context, according to the principles of Evidence-Based Practice. These guidelines were brought together into the African First Aid Materials (AFAM). In 2016, the AFAM guidelines were updated, taking into account the latest scientific evidence, expert opinions and target group preferences, and using a vastly improved methodology.

# **Objectives**

To assess the impact of this update on the AFAM recommendations and didactic materials.

### Methods

**BEST AVAILABLE SCIENTIFIC EVIDENCE** 





first aid

materials

#### 2011

Changes in:

- Methodology
- Scientific evidence
- Expert opinion
- Target group preferences



# included studies were compared between 2011 and 2016



**EVIDENCE-**

#### OF THE TARGET GROUP

Collected via African Red Cross societies

#### **PRACTICAL EXPERIENCE AND EXPERTISE OF EXPERTS IN THE FIELD**

BASED

PRACTICE

Gathered during an online meeting of a multidisciplinary African expert panel

# Results

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### 1. Methodological improvements

2011: **27** questions and search strategies, at the level of the injury e.g. "Which intervention should be used in the first aid management" of burns?"

2016: **114** PICO questions and search strategies, at the level of the intervention, of which **50** with interventions specific to the African context

### FROM GPP TO WEAK RECOMMENDATION

#### Fire safety education for prevention of burns

- 2011: "Teach children about household objects that can burn them and about the danger of fire."
- 2016: Limited evidence of low quality in favour of safety education. Statistically significant increase in

e.g. "In people with burns (P), is treating the burn with honey (I), compared to alternative treatment options (C), effective for survival, functional recovery, pain, complications, time to resumption of usual activity, restoration to the pre-exposure condition, time to resolution of the symptoms (O)?"





### 2. Scientific evidence

- From 248 to 295 included studies
- Changes in 9 recommendations:
  - 8 new recommendations
  - I Good Practice Point (GPP) became a weak recommendation



#### e.g. Zinc-fortified ORS for treatment of diarrhoea

- 2011: "Try to obtain zinc tablets. This will help to fight the diarrhoea."
- 2016: Evidence of moderate quality in favour of zinc-

- safe hot water temperature
- installation of fire guards
- having a fire escape plan compared to no safety education.

### 3. Expert opinion

Changes in **4** recommendations

#### e.g. Vaseline for treatment of burns

- 2011: "Do not use vaseline for burns. Vaseline is not sterile and can cause infection."
- 2016:
  - Limited evidence of moderate quality in favour of vaseline
  - Expert panel:
    - Evidence compares vaseline with silver sulfadiazine
    - Vaseline and silver sulfadiazine mask the wound, making it difficult for a medical doctor to judge



Sentence about the use of vaseline is left out

### 4. Target group preferences

- Additional chapter on anatomy and physiology
- Additional background information on psychosocial first aid, malaria, cholera and measles







Statistically significant decrease in

- mean diarrhoea frequency
- hospitalisation duration
- mean diarrhoea duration
- duration of diarrhoea less than 4 days compared to standard WHO ORS.



*"Try to obtain zinc tablets or use zinc-fortified ORS"* instead of standard ORS if available."

# Conclusions

- Methodological improvements have led to more sensitive searches of evidence and identification of additional relevant evidence.
- Updating the AFAM guidelines has exposed new scientific evidence, fine-tuned expert opinions and revealed new target group preferences. A five-year update of evidence-based guidelines is therefore worthwhile and warranted.
- In run-up to the next update, the systematic collection of feedback from the target group should receive more attention.

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